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**Division of Energy**

**Public Meeting Report #1**  
**Energy Usage**  
**Missouri Comprehensive State Energy Plan**

**Stakeholder Engagement**  
**October 1, 2014**  
**St. Louis, Missouri**  
**Washington University, Eric P. Newman Education Center Auditorium**

**BACKGROUND**

Under Governor Jay Nixon's Executive Order 14-06, the Division of Energy will gather public input to identify the policies and practices that will meet Missouri's need for clean, affordable and abundant energy in the future.

This meeting represented the first of seven public meetings held around the State of Missouri to collect public input and feedback into the Comprehensive Statewide Energy Plan (the Plan).

The Plan will recommend policies that encourage efficient use of energy in all sectors of the economy; spur job creation and economic growth; and promote development, security and affordability of diverse energy sources.

The objectives of the meeting included:

- 1) To convene individuals who were appointed to the Plan's Steering Committee and develop a culture for dialogue;
- 2) Discuss opportunities and issues around the topic of energy usage;
- 3) To introduce the background and purpose of the Plan to the public; and
- 4) To gather public input and comments around different energy topics.

**AGENDA**

The meeting was structured in four parts:

- 1) Introduction and welcoming remarks from Lewis Mills, Director of the Division of Energy.
- 2) Short presentations from experts.
- 3) Discussion among Steering Committee members.
- 4) Public comment period.

## ***Agenda Details***

1:30 PM	Welcome and Introductions Lewis Mills, Director, Division of Energy
1:35 PM	Energy Efficiency at Washington University Hank Webber, Executive Vice Chancellor for Administration, Washington University
1:50 PM	Missouri's Comprehensive State Energy Plan Lewis Mills, Director, Division of Energy
2:10 PM	The Importance of State Energy Plans Josh Campbell, Executive Director, Missouri Energy Initiative
2:35 PM	Energy Initiatives in Missouri Government Doug Nelson, Commissioner, Office of Administration
2:45 PM	Energy Efficiency in St. Louis Catherine Werner, City of St. Louis
2:55 PM	Steering Committee Discussion Topic: Energy Usage Facilitator: Bennett J. Johnson, III, Inova Energy Group team
3:55 PM	Break
4:10 PM	Public Comment Period Facilitator: Bennett J. Johnson, III, Inova Energy Group team
5:30 PM	Adjourn

## **ATTENDANCE**

### ***Steering Committee Members***

<b>First Name</b>	<b>Last Name</b>	<b>Affiliation</b>
Steve	Ahrens	Missouri Propane Gas Association
Dustin	Allison	Office of Public Counsel
Elizabeth	Bax	Hawthorn Foundation
Brad	Beecher	Empire District Electric Company
Joan	Bray	Consumers Council of Missouri
Josh	Campbell	Missouri Energy Initiative

First Name	Last Name	Affiliation
Jim	Curran	Electrical Connection
Jennifer	Curran	Midcontinent Independent System Operator, Inc.
Steve	Damer	Leggett & Platt, Inc.
Mike	Downing	Missouri Department of Economic Development
Joe	Driskill	Leonard Wood Institute
Steve	Gaw	The Wind Coalition
Joe	Gillman	Missouri Department of Natural Resources
Peter	Hofherr	St. James Winery
Tracy	Howe-Koch	Missouri Interfaith Power & Light
Rick	Hunter	Microgrid Solar
Frank	Kartmann	Missouri American Water Company
Duncan	Kincheloe	Missouri Public Utility Alliance
Vicki	LaRose	Transportation Engineers Association
Heather	Lockard	Missouri Association for Community Action
Marc	Lopata	Azimuth Energy
Karen	Massey	Environmental Improvement & Energy Resources Authority
Michael	Moehn	Ameren Missouri
Doug	Nelson	Missouri Office of Administration
Dave	Nichols	Missouri Department of Transportation
Fred	Palmer	Peabody Energy
Scott	Ramshaw	Plumbers & Pipefitters Local 562
David	Russell	Missouri Department of Higher Education
David	Shanks	The Boeing Company
Suzanne	Sitherwood	The Laclede Group
Terry	Smith	Hampton Alternative Energy Products
Rebecca	Stanfield	Natural Resources Defense Council
Brent	Stewart	Missouri Association of Electric Cooperatives
Phil	Valko	Washington University
Kevin	Van de Ven	Nucor Corp.
Ron	Walker	State Emergency Management Agency
Catherine	Werner	City of St. Louis
Gary	Wheeler	Missouri Soybean Association

### ***Public Attendance***

A total of 97 members of the public attended the meeting.

## **MEETING PROGRESSION**

### ***Welcoming Remarks***

Lewis Mills, Director of the Department of Economic Development's Division of Energy, welcomed Steering Committee members and the public to the meeting, presented the agenda for the meeting, and invited comments from the public during the public comment period.

Mr. Mills then provided background information on Executive Order 14-06 and an overview of the planning process for the Comprehensive Statewide Energy Plan, including the timeline for development and details on the public input process.

## ***Presentations***

Four different speakers were invited to present to the Steering Committee and the public on topics related to energy. The PowerPoint slides and video of the presentations shared at the meeting are available for viewing at <http://energy.mo.gov/energy/about/comprehensive-state-energy-plan>.

**Title of Presentation:** Energy Efficiency at Washington University

**Speaker:** Hank Webber, Executive Vice Chancellor for Administration, Washington University

**Summary:** Mr. Webber talked about Washington University and its commitment to the areas of sustainability and energy efficiency. During the last two decades, Washington University has doubled in size while reducing its energy use. He then talked about how this was accomplished through their practices and research.

**Title of Presentation:** The Importance of State Energy Plans

**Speaker:** Josh Campbell, Executive Director, Missouri Energy Initiative

**Summary:** Mr. Campbell provided an overview of state energy plans, how they are developed and what their benefit is to states around the country.

**Title of Presentation:** Energy Initiatives in Missouri Government

**Speaker:** Doug Nelson, Commissioner, Office of Administration

**Summary:** Mr. Nelson talked about initiatives that the Office of Administration has undertaken to improve energy efficiency at large state buildings, medical facilities and prisons. He also described a system that is used to monitor energy operations in 3200 state buildings.

**Title of Presentation:** Energy Efficiency in St. Louis

**Speaker:** Catherine Werner, City of St. Louis

**Summary:** Ms. Werner welcomed everybody to the City of St. Louis and provided an overview of the sustainability initiatives that the City has undertaken in the last five years. She also provided an overview of the City's first sustainability plan.

## ***Steering Committee Discussion***

Bennett J. Johnson, III, with the Inova Energy Group team, facilitated the Steering Committee discussion. As this represented the first time that the Steering Committee group convened, all attending members were asked to introduce themselves and speak for three minutes about their priorities for the Plan and the areas they would like to focus on. These introductions and initial

comments took the entire length of the time allocated for the Steering Committee discussion period. Initial comments from Steering Committee members are included in Attachment 1.

### ***Public Comment Period***

During the public comment period, a total of 19 individuals submitted verbal testimony to the Steering Committee members and the Department of Economic Development. All comments were recorded and included in this report as Attachment 2.

## ATTACHMENT 1 – Steering Committee Comments

October 1, 2014

St. Louis, Washington University, Eric P. Newman Education Center Auditorium

The comments provided in this document do not represent a verbatim transcription of the comments received verbally and may incorporate some close paraphrasing on behalf of the record-keeper. Comments are not shown in the order in which they were received.

First Name	Last Name	Affiliation	Comments
Steve	Ahrens	Missouri Propane Gas Association	Propane heats 10% of homes in Missouri, but the fuel does not get much attention. St. Louis leads the state and nation in adoption of propane lawn equipment. Missouri has many energy resources and the propane industry just wants to help.
Dustin	Allison	Office of Public Counsel	There is a tension between long-term planning and what our customers need to deal with on a short-term basis. As we move forward we need to be cognizant of this tension, and we need to recognize what it is that the citizens of Missouri have to deal with every month (for example, paying utility bills). With respect to an energy efficiency component, I would like to see a conversation about treating multi-family housing and rental housing in terms of energy efficiency. Currently, incentives are not properly aligned. We need to ensure that multi-family housing is taken into consideration. Our regulatory regime is currently fairly flexible and creative, and as we are developing statewide goals we need to keep in mind that this regulatory flexibility exists and also consider how we need to plan with respect to a regulated utility versus a municipal utility, and how we plan with respect to a cooperative. We need to make sure that the plan does not favor customers of one utility over another.
Elizabeth	Bax	Hawthorn Foundation	The Hawthorne Foundation represents a lot of business members. Energy is a significant economic development issue. I am here to learn how to frame and share the discussion with people across the state.
Brad	Beecher	Empire District Electric Company	We need a balanced mix of energy resources, timely recovery and energy facility restoration following natural disasters.
Joan	Bray	Consumers Council of Missouri	I want the planning process and final product to not lose sight of people, particularly for people and families who feel that they are powerless. I am not just concerned about pocketbook aspects but also want to see aspirations of quality of life issues: mobility, long-term effects on health, work and family life. Ultimately we want consumers to know what the outcome of the plan is.

First Name	Last Name	Affiliation	Comments
Josh	Campbell	Missouri Energy Initiative	My main goal is to develop a stakeholder input process that creates a plan that is implementable and actionable.
Jennifer	Curran	Midcontinent Independent System Operator, Inc.	The interest of MISO is around how we can support the state. How do we support, leverage and enhance regional resources? We need to ensure that regional infrastructure continues to provide reliability and overall efficiency of the electric system for the benefit of consumers.
Jim	Curran	Electrical Connection	We are in this together. We're all from diverse backgrounds and need to work together to achieve a plan. It is possible. As we look at objectives of the Plan, we should consider affordability, reliability, safety and jobs created as paramount. Green jobs, good-skilled and well-paid jobs. We need to keep the Plan fair and equitable for all energy sources and it shouldn't impose unneeded regulation to promote one above another. It cannot give somebody an unfair competitive advantage. This Plan will be for our children and grandchildren.
Steve	Damer	Leggett & Platt, Inc.	Reiterate Gary Wheeler's (Missouri Soybean Association) comments about incentivizing private investment. We are very aggressive about energy demand-side management. Another issue to consider, especially with the polar vortex we faced this year, is for better collaboration between natural gas and electric utilities. Having spoken with a lot of utilities, my understanding is that this is simply a matter of lack of communication.
Mike	Downing	Missouri Department of Economic Development	My interest is in developing the economy. One of the reasons that Missouri is attractive for business is the cost of energy and ability of utilities to provide reliable power. We need to be sure it stays that way.
Joe	Driskill	Leonard Wood Institute	During time I spent at the Department of Economic Development, I learned that one of the best things the State can do is enable communities to secure their own future through economic development. In a similar fashion, this process can produce a plan that aligns the tremendous expertise that we have around the state, and considers the political realities. The Plan should challenge policy-makers to come up with a set of tools that enables communities to do a better job of ensuring their own futures. Energy is a huge part of this equation, especially for keeping businesses in rural areas. My organization is trying to improve quality of life and sustainability around 4 communities in the Fort Leonard Wood area. We have great economic engines in the State (US Army) that care about these same issues. We need to keep being job creators for Missouri.

First Name	Last Name	Affiliation	Comments
Steve	Gaw	The Wind Coalition	Missouri has tremendous potential on the wind front for development that has not been realized to a great extent. The State ranks 11th in the country in terms of wind potential. Wind brings potential in terms of both economic development and on the landowner front through lease payments. There are multiple opportunities that we have. This Steering Committee should be able to supply us with good food-for-thought to figure out where we should focus our attention. Is there low-hanging fruit? Have we exhausted the list? Are there things over the long run that we can figure out as well? We should try to find a balance between short-term and long-term. We should look for Missouri to be a low-cost energy state at the same time as we pay attention to what happens outside of the State. We are in a region where the electric grid does not respect state boundaries. We are also dealing with U.S. Environmental Protection Agency proposed 111(d) rules (Clean Power Plan) and changes to the energy landscape on the regulatory front. These regulatory changes will impact how we look at energy and what makes the most sense moving forward in regard to supply.
Joe	Gillman	Missouri Department of Natural Resources	We need to look at the upstream consequences of some of the energy-related issues and policy that we are considering. If we look at modern technology for wind, solar, and hydro, many things rely on natural resources that need to be extracted and that extraction has an impact on Missouri. Many of these minerals are important for battery storage and transmission. This is an issue for the Department of Natural Resources because of depletion of resources and creation of legacy issues.
Bill	Gipson	Missouri Southern State University	I am keenly interested in maintaining resources for energy reduction as well as energy restoration following a natural or man-made disaster.
Peter	Hofherr	St. James Winery	We are interested in a wide range of energy issues from agricultural to manufacturing to retail to consumers: (1) having a flexible policy for the State. Energy efficiency in agriculture is critical. (2) Energy availability and reliability in rural areas. From our standpoint, most of the State wineries (127 wineries and over 400 vineyards) are in rural Missouri. (3) We continually see technology change and we should have the ability to incorporate technology changes into agricultural production. (4) There is an opportunity for education and public outreach. People who drink wine are generally interested in sustainability and the types of issues that we are going to address through the development of the Plan. Public outreach is also important so the more we personalize the Plan, the more people will be prompted to take action or at least be less passive about energy issues that impact them.
Tracy	Howe-Koch	Missouri Interfaith Power & Light	It is a moral obligation for us to be good stewards of the earth. We want to see large amounts of renewable energy. We want to bring back the beauty of nature, maintain our resources or mitigate the damage done. We are looking for doable and actionable goals, and something that will actually happen.



First Name	Last Name	Affiliation	Comments
Rick	Hunter	Microgrid Solar	Some form of decoupling investor-owned utility (IOU) profits from power generation or usage. This is underlying a lot of the problems we have and will challenge our pursuit of a more advanced plan. This would be reaching and not something to go about lightly. Take a long-term view. What kind of changes need to take place over 5-10 years? This is one of the game changers.
Frank	Kartmann	Missouri American Water	We are interested in seeing how energy can also assist in improving water efficiency. There are major opportunities coming from infrastructure, conservation, investment, and creating appropriate incentives. At the top of our list is education. There has to be a lot of education around this topic to help people understand the true value of the utility service they receive and also what the real cost drivers of utility services are. If we think of conservation, a customer uses less energy and may save some costs, but much of what they pay for is the utilities' fixed costs of operation. There is a huge educational component there. Water is heavy in energy use and it takes a lot of energy to move it. There are great opportunities to make our water systems more efficient with less leakage and, therefore, less energy consumption for water transportation.
Duncan	Kincheloe	Missouri Public Utility Alliance	Municipal utilities are citizen-owned through their municipal governments and regulated by city government leaders. There are approximately 85 municipal utilities in the State of Missouri providing electric and some gas services. I am interested in replicating a similar process that we took advantage of 15 years ago under Governor Holden's energy plan. At that time we took to the task force that was responsible for this effort, some problems we had in terms of the ability of municipal utilities to work together. This resulted in practical and concrete initiatives that allowed us to develop hundreds of megawatts in base load electricity. Munis are making investments in utility scale solar. A couple of items we are interested in. Consider what the economy is that we expect Missouri to have in the future. We need abundant, affordable energy. The manufacturing industry is energy intensive. Many communities in Missouri do not have access to low-cost energy. How can we find mechanisms to bring affordable natural gas to more communities? Last item: we need to be mindful that research and education need strong support.
Vicki	LaRose	Transportation Engineers Association	For this Plan to be successful we need to make sure that it educates the public. As technology changes in the energy industry, it affects transportation systems. As there are more electric cars, we need to consider how we are transitioning service stations and planning for that growth.
Heather	Lockard	Missouri Association for Community Action	For us it is about people and specifically about low-income people. Low-income residents spend close to 30% of their income on energy. That's more of their income spent on energy than middle and upper class residents. This is about the economic development aspect of the Plan.

First Name	Last Name	Affiliation	Comments
Marc	Lopata	Azimuth Energy	I am excited to see Missouri strive to be a leader and not just a follower. The expertise and passion around the table will allow some great outcomes. Attracting new businesses should be a priority of the State. I have seen this happen in the solar industry growing to a \$300 million industry over 5 years. The implementation of the Plan should lead to predictability and certainty. Some of these energy projects can take years around planning and implementation. Uncertainty harms innovation. Education is key. It's not just about building. We are also trying to affect the way people behave. Changing behavior is a challenge and can only be done through education. A strong and effective energy plan will be good for energy security and to support economic vitality and job growth. Energy costs will likely go up, but I do not think that is mutually exclusive from vitality and growth in the State.
Karen	Massey	Environmental Improvement & Energy Resources Authority	We need to consider balance in both environment and economy. We can find ways to mitigate or minimize the negative impacts between one and the other. Those who made presentations today showed economic and environmental benefits of energy. We are really on the cusp of an energy renaissance; we really need to take advantage for the State of Missouri. Actionable goals will be critical.
Michael	Moehn	Ameren Missouri	These are policies and issues we need to get right. This morning (10/01/2014) Ameren filed their Integrated Resources Plan (IRP) which included plans for developing additional megawatts of renewable power. In addition, we announced that during the next 15 years we will retire a third of our coal fleet. The issues we would like to focus on include: affordability, predictability, trying to keep products as low-cost as possible. We are investing \$150 million in energy efficiency over the next three years.
Doug	Nelson	Missouri Office of Administration	I am interested in fleet management issues. The State has a huge auto fleet, and we need to figure out how we can address issues there. Of additional interest is facility energy usage, maintenance and sustainability. How can we maximize resources in these areas? I am also very interested in emergency energy needs in instances of natural disasters.
Dave	Nichols	Missouri Department of Transportation	There are operational opportunities within the transportation sector. We have hundreds of facilities around the State. The more efficient our fleets and facilities can become, the more money we have to provide product and services to Missourians. We recently right-sized our organization to save more than \$500 million and passed these cost-savings to the public. On the programmatic area, we are interested in looking at the multi-modal aspects of transportation. We have done a long-range planning study on transportation needs. We are seeing a significant change in transportation around the State. Trends are moving to alternative modes of transportation. Transportation groups are interested in helping out. They play key roles in emergency response in terms of natural disasters. Some provocative thoughts for the Steering Committee: What can we do with state-owned infrastructure with public-private-partnerships?

First Name	Last Name	Affiliation	Comments
Scott	Ramshaw	Plumbers & Pipefitters Local 562	Our organization not only builds and maintains your facilities, but we also help our members install and deploy new technologies. Let's move this State forward.
David	Russell	Missouri Department of Higher Education	We have 220 colleges and universities in the State, as well as many other institutions that are engaged in teaching students skills they need to be prepared to enter various energy fields and need to take stock to be sure they're prepared for the energy-related careers in the future. But many institutions around the State don't have a comprehensive view of energy. Several colleges have their own energy plans, but they also have limited resources. Several of them are research institutions and are working in research areas related to energy and alternative fuels, a number of them working with industry and commerce. Universities have a stake in the game.
David	Shanks	The Boeing Company	Energy rates for industrial facilities are a discriminator in terms of decisions that are made to determine what work gets put in each location. We need to recognize that companies that are present in Missouri are already driven by corporate goals, internal targets of savings, greenhouse gases and so forth. A lot of this is already baked in to corporate policy – how does this get incorporated into the Plan? There are some interesting things going on in the St. Louis Chamber of Commerce. There is something called the Green Business Challenge. We should recognize those voluntary business programs.
Suzanne	Sitherwood	The Laclede Group	We appreciate the public meeting process. It is encouraging to hear the Steering Committee talk about economic development. There is not a single solution. Our goal should be not only keeping industry and residents in the State but also thinking about attracting new businesses and expanding existing businesses.
Terry	Smith	Hampton Alternative Energy Products	I'm interested in representing the rural perspective. I am proud to be involved with an agricultural project that is good for the environment. We appreciate a reliable energy supply. This Plan is important for the next generation and we should not lose sight of that.
Rebecca	Stanfield	Natural Resources Defense Council	One area of focus should be energy efficiency and deploying it as a utility resource. We are interested in exploring opportunities to maximize energy efficiency in Missouri. If we think about all different building types as a source of energy, how you line up these resources is different for every sector. I hope the working groups established for this process can be a venue in which we can explore solutions through a sector-by-sector approach. What works for multi-family buildings does not work for universities or commercial buildings, and we need to be aware of this.

First Name	Last Name	Affiliation	Comments
Brent	Stewart	Association of Missouri Electric Cooperatives	I bring the perspective of electricity users in rural areas. Cooperatives are different than other electric suppliers, as they operate on a non-profit basis, and are member-owned. There are 47 electric coops in the state and we serve 875,000 members. We want to maintain member control. Our customers tell us they are interested in 3 things: safety, reliability and affordability. We need to focus on the people - this is important in rural Missouri. Most of our members are lower-income so this is a big deal for them. Our interest, therefore, includes safety, reliability, affordability and rural economic development.
Jim	Turner	Sierra Club-Missouri Chapter	KCP&L in July began an energy efficiency program to invest \$19M in customer efficiency, and customers will save \$100 million in costs over decades ahead. Other states have had efficiency programs for years and they get robust results as they hone their marketing and outreach and expand program offerings. We need to expand the contractor base to install efficiency measures. Sierra Club urges utilities to double-down on efficiency, because it is the least-costly way to ensure that Missouri energy needs are met. We are also interested in the development of solar and wind energy because it helps to level costs and improves health outcomes. Their costs are decreasing while oil and coal costs are increasing. Sierra Club is also concerned about fracking that is part of natural gas extraction. We are encouraged to see the breadth of topics that the Plan will cover.
Phil	Valko	Washington University	Three items that are important to me: (1) Predictability around pricing. Even if that means around price increases; (2) Predictability of environmental policy - this comes to the role of the Plan in incentivizing economic development. Uncertainty is a challenge to development; (3) Having a clear State policy around distributed generation. As an institution that has greenhouse gas reduction goals, Washington University feels it has the right tools at its disposal to move forward. We are also looking at a policy that leads to reduced greenhouse gas emissions.
Kevin	Van de Ven	Nucor Corp.	My company is a leader in job creation. A few months ago we had a discussion with government about aligning this Plan with job creation from an industrial standpoint.
Ron	Walker	State Emergency Management Agency	Everybody in this room has been impacted by some sort of natural disaster. From an emergency management standpoint we are interested in security and resiliency of delivery mechanisms. We use this as an indicator of how things are doing and also return of normalcy after the disaster strikes.
Catherine	Werner	City of St. Louis	As someone who has the benefit of having an award winning plan (City of St. Louis Sustainability Plan), but knowing how hard it is to implement, I am interested in lining up resources that are going to be needed to make the Plan a reality so that it is a workable state energy plan. I am delighted that Governor Nixon launched this process, and hope we all continue to rise to the occasion.

First Name	Last Name	Affiliation	Comments
Gary	Wheeler	Missouri Soybean Association	Overall, I am interested in finding out who will manage the Plan. If we get comments back, after it is implemented, who will manage it? What is the shelf life of the Plan? What happens in a new administration? Some priorities for our growers and the group I represent: (1) Sustained improved efficiencies of current technologies; (2) Invest in the knowledge base that we currently have within Missouri-based companies and facilitate additional investment into new technologies; (3) Incentivize private investment within new opportunities but also current technologies that are not yet commercialized.

## ATTACHMENT 2 - Public Comments

October 1, 2014

St. Louis, Washington University, Eric P. Newman Education Center Auditorium

The comments provided in this document do not represent a verbatim transcription of the comments received verbally and may incorporate some close paraphrasing on behalf of the record-keeper. Comments are not shown in the order in which they were received.

First Name	Last Name	Affiliation	Comment
Glenda	Abney	MO Botanical Gardens	EarthWays Center embraces sustainability and energy efficiency issues. We know people's choices on insulation or what they do in their houses has an impact in ecosystem restoration. We would like to suggest that when coming up with plan ideas and implementation follow-up, you should consider continuing strong stakeholder efforts to make things happen. For example: the Home Performance with Energy Star program (HPwES) is excellent and is available in most states. It is also available in Missouri but not very big. There are opportunities to expand to a bigger level of savings with stakeholders that work together: Non-profits, contractors, educators, agencies and advocacy groups. There will always be more existing buildings than any other building type, so you really want to engage those people and the HPwES program does just that. Second item: energy education is critical. We want better and more informed-decision makers, and this starts with true education.
Frances	Babb		One action item: make land use policy changes that support solar energy. For the past three years, I have been involved in disputes over the solar panel that I have installed on my property. Three year long legal battle for the right to put solar in my roof and backyard. I believe every Missouri resident deserves the right to put solar on his property regardless of which side of the street his roof faces and regardless in what part of the city he is located. What is happening today is that neighbors complain, and the cost of litigation is expensive. If you go through the trouble, expense and effort to install solar photovoltaic cells, then they should stay there and no one should have the right to take that solar photovoltaic away from you. Land use policy change is very important.
Anne	Charles	Sierra Club volunteer	Hundreds of people in Missouri die every year due to air pollution from coal factories, When you are putting together the Plan, don't focus just on the people who are healthy, but consider those who are being affected by air pollution and water pollution.

First Name	Last Name	Affiliation	Comment
John	Delurey	Sierra Club	I was frustrated at the lack of mention of climate change during Steering Committee discussion. Climate change is not just a moral imperative but also an economic imperative. There are low-hanging fruits like energy efficiency and solar energy, but we have to go further. We don't have a lot of options left and the clock is ticking rapidly. Assuming we can take care of those who can't - who wouldn't pay a little bit more to ensure that our children don't have to deal with these issues? There are lots of problems coming down the pipeline quickly and we need energy efficiency to address it. We need to make sure we are paying attention to education. It is not just about current issues; we are dealing with long-term implications. We need to learn to manage risk.
Kenneth B.	Denson	Citizens Climate & Lobby Organizing for Action	We have to be practical and logical, but now is the time to be bold. We need a plan for the 21st century. We don't need to keep energy efficiency going with 19th century technology. We have to be cost-effective, but don't judge cost-effectiveness only by what is charged on energy bills. Consider all other impacts, and the big picture of externalities. Be bold and don't overlook hidden costs.
Sara	Edgar	Sierra Club	Discouraged to see how few residents of St. Louis were in the room. Unfortunate they did not get the word that this meeting was happening. Is there an opportunity to have an additional meeting in St. Louis for residents to have those voices heard? I brought 200 photos of individuals that want clean energy that could not make it to the meeting. This is an important issue for health, for climate. I work with individuals who live close to coal plants and they deal with water and pollution. I urge the Steering Committee to do something progressive and forward thinking for Missouri.
Mollie	Freebairn	Energy scientist	When I worked for the Department of Natural Resources I found out that solar energy is a very viable technology. Missouri is very supportive of renewable energy in spite of the historic contrast with the fact that Missouri continues to burn coal; this is a contradiction with what the State wants. We need to stop outsourcing 80% of energy dollars to pay for coal from WY, when solar, wind, geothermal and energy efficiency have potential to be the biggest job creators in the State and region. Solar rebates were terminated and this is affecting the solar industry in the State. There is a large wind industry that we are fortunate to have. We may want to team up with neighboring states to develop regional wind energy projects. Energy efficiency is also a huge job creator.
Mike	Grimes	Commercial Energy Consultants	Question: How can we have an energy plan and not consider deregulation of electricity and natural gas? Josh Campbell (MEI) mentioned that 38 states have a plan and that energy prices have been reduced by almost 50%. Illinois is a good example. When we deregulated in 1997, they saved \$30B for consumers by giving them a choice as to who supplies their power. We need to consider this in the State of Missouri. Deregulation is not a new concept; 35 states have already done it.
John	Hickey	Sierra Club	I brought my Laclede Gas bill from Jan 2010. I did energy efficiency measures in my house over the previous year. Even though we had the same number of heating degree days my expenses went down 33%, from putting in a high energy efficiency boiler and attic insulation. Energy efficiency works. At the aggregate level, Ameren is through half of its energy efficiency program and they have only spent 1/3 of their money but have achieved 50% of the program target. It is



First Name	Last Name	Affiliation	Comment
			important that the Plan emphasizes the need for utilities to invest in energy efficiency. Energy efficiency is by far the cheaper form of energy. One area of opportunity is multi-family housing and low- income residents. Another opportunity is building codes. St. Louis is operating under the 2009 International Energy Code, the current code is 2015. It is important that we convince code jurisdictions to adopt the 2015 code, much cheaper to do efficiency on the front end when building. Expand spending on utility programs and update building codes.
Sue	Kelly		I was struck by the breadth of expertise that you bring and realize that you all have a unique opportunity and responsibility to keep energy affordable. Keep that in mind, focus not necessarily on the business interest of a particular group, but look at energy as a whole.
Andy	Knott	Sierra Club	Finishing this Plan in May is an opportune time, because in June the Missouri Department of Natural Resources will develop a plan to comply with the Clean Power Plan. Talk about how clean energy development is an economic and environmental win for Missouri. Kansas City Power & Light projects that investments in wind and energy efficiency will save customers \$1 billion over 20 years. The City of Independence has replaced all streetlights with LED and invested in wind in 2008 at \$11M/year in savings. If Missouri relies more on state-based wind it will create jobs in Missouri. Currently 13 companies in Missouri are involved in turbine parts manufacturing. Missouri's existing 252 turbines resulted in payments to property owners. According to solar foundation, Missouri is ranked 12th in nation with people working in the solar field. KCPL stopped popular solar rebate programs. The State should evaluate solar's critical role in achieving economic development goals.
Tim	Michels	Energy Resources Group, Inc.	We need to keep it simple. There needs to be strong and definitive metrics that are set on economic yields. There are \$2 trillion in economic opportunity in the US that will pay back within four years or less and reduce energy consumption by 25%. We need clear mandates to achieve investment goals. First consider cost-effective efficiency and renewables (huge resource opportunity). These options will inevitably reach their points of diminishing returns, so we need to start reaching out to the next generation of solutions. Things I want to see happen: capital formation is key. The State has two programs that need funding - State Energy Loan Program for schools, municipalities, universities and hospitals. Needs to be funded more so that it is ever green instead of something that becomes available every 18 months. Office of Administration has done a good job but it is also fighting with having enough money to pursue mandates with economic limits that are set. Energy reductions will set us apart as an attractive place to do business, and will create jobs and reduce tax burden. It will also have a measure of predictability because it will keep prices down.
Bruce	Morrison	Great Rivers Environmental Law Center	As a resident of St. Louis I am submitting comments to request promotion of solar, wind and water safe-energy technology. Nuclear power is not safe and is expensive. The nuclear plant in Mid-Missouri, its fuel pool was not designed to store the radiation rods. Spent fuel rods were designed to be stored for only a year and a half; however, no commercial processing plant or disposing site exists in the U.S. 30 years later, all of Callaway's used up fuel rods are still setting there. The ongoing Fukushima accident is evidence that used fuel rods are dangerous. Hope that



First Name	Last Name	Affiliation	Comment
			the Plan does not include nuclear power.
Jeffrey	Owens	Missouri Solar Applications	Two things: Problems that we face are climate change (most urgent need), environmental toxicity, rising costs of fuels, need for job growth, social justice. Citizens Climate Lobby has a good handle on an approach and solutions to price carbon and eliminate greenhouse gas emissions. 50 Roadmaps for 50 states exists and this was done out of Stanford University, and this has led to a roadmap for Missouri. As far as solar specifically, I wanted to add a few comments hoping this leads to more competition in generation.
Christine	Page		I try to be as energy efficient as possible. Examples of how she has gone energy efficient yet it's not enough; we have to take massive steps to reduce the amount of carbon that we are injecting into our atmosphere. Supports a clean power plan.
Caroline	Pufalt	Sierra Club volunteer	I understood that energy efficiency was the main topic of this meeting. Energy efficiency is the key to a better future for the state. As it was mentioned, buildings are one of the largest consumers of energy. Looking at energy efficiency in buildings is important. St. Louis has a lot of older buildings and they want to see the community come up with a plan to retrofit those older buildings. A week ago I heard Amory Lovins (Chairman of the Rocky Mountain Institute) talk to the Danforth Plant Center (speaker series), encourage you to look up his new book because the talk will help you be informed and inspired and expand perception of energy efficiency.
Anita	Randolph	Audubon Missouri	Adopt aggressive energy efficiency goals for inclusion in plans (lowest-cost option), also an avenue to reduce fossil fuels, we support the increased use of renewable energy. Include energy efficiency and renewable energy as underpinnings of a responsible energy plan.
Jane	Siebel	Sierra Club volunteer	Citizens Client Lobby. People are demanding change and have a deep concern for the environment. I appreciate what you are doing; looking for clean plan; I am willing to make sacrifices; I am willing to put my life on the line; I believe it is a moral obligation to start making the changes.
Julie	Viel		For my children and grandchildren, climate change is really going to affect these generations. We need to do something to reduce greenhouse gases. I do whatever I need to do to educate people about the issue. I went on the climate march in New York with 400 thousand other people. People will be much more involved as they realize the dangerous situation we are in. People who have a lot of money can participate through donating to campaigns. There are practical things to do: try to find all energy efficiencies and get them all right now. Wind and solar needed to get there - fossil fuels are going away. The State needs more charging stations for electric vehicles.